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TRANSMITTAL FORM

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Total Number of Pages in This Submission

Application Number 10/713,472

Filing Date November 14, 2003

First Named Inventor **Charles A. Vacanti**

Art Unit 1615

Examiner Name | Not yet assigned

Attorney Docket Number | VAC 102 CON (2)

ENCLOSURES *(Check all that apply)*

<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): seven (7) pages of PTO-1449; return postcard
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Date	December <u>1</u> , 2004	Reg. No.	55,589

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FEE TRANSMITTAL for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 0.00)

Complete if Known

Application Number	10/713,472
Filing Date	November 14, 2003
First Named Inventor	Charles A. Vacanti
Examiner Name	Not yet assigned
Art Unit	1615
Attorney Docket No.	VAC 102 CON (2)

METHOD OF PAYMENT (check all that apply)

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 Deposit Account:
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FEE CALCULATION

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code (\$)	Fee Code (\$)		
1001 790	2001 395	Utility filing fee	
1002 350	2002 175	Design filing fee	
1003 550	2003 275	Plant filing fee	
1004 790	2004 395	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)		(\$)	

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims	Fee from below	Fee Paid
Total Claims	23	-23 = 0	
Independent Claims	3	-3** = 0	
Multiple Dependent			

Large Entity	Small Entity	Fee Description
Fee Code (\$)	Fee Code (\$)	
1202 18	2202 9	Claims in excess of 20
1201 88	2201 44	Independent claims in excess of 3
1203 300	2203 150	Multiple dependent claim, if not paid
1204 88	2204 44	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent
SUBTOTAL (2)		(\$ 0.00)

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3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	1053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for ex parte reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 430	2252 215	Extension for reply within second month	
1253 980	2253 490	Extension for reply within third month	
1254 1,530	2254 765	Extension for reply within fourth month	
1255 2,080	2255 1,040	Extension for reply within fifth month	
1401 340	2401 170	Notice of Appeal	
1402 340	2402 170	Filing a brief in support of an appeal	
1403 300	2403 150	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,330	2453 665	Petition to revive - unintentional	
1501 1,370	2501 685	Utility issue fee (or reissue)	
1502 490	2502 245	Design issue fee	
1503 660	2503 330	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
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1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
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1810 790	2810 395	For each additional invention to be examined (37 CFR 1.129(b))	
1801 790	2801 395	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

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SUBTOTAL (3) (\$ 0.00)

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Name (Print/Type)	Tiffany B. Salmon	Registration No. (Attorney/Agent)	55,589	Telephone (404) 879-2153
Signature			Date	December 1, 2004

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EE 10 2003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Charles A. Vacanti, Joseph P. Vacanti, and Martin P. Vacanti

Serial No.: 10/713,472 Art Unit: 1615

Filed: November 14, 2003 Examiner: Not Yet Assigned

For: *GUIDED DEVELOPMENT AND SUPPORT OF HYDROGEL-CELL COMPOSITIONS*

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.56 and 37 C.F.R. §1.97, Applicants submit an Information Disclosure Statement, including 7 pages of Form PTO-1449. The documents cited below were cited by or submitted to the Patent Office in Application Serial No. 09/658,912, filed September 11, 2000, now abandoned, which is a continuation of Application Serial No. 09/200,033, filed November 25, 1998, which issued as U.S. Patent 6,171,610 on January 9, 2001, which is a continuation-in-part of U.S. Serial No. 09/066,038, filed April 24, 1998, to which the present application claims priority. Pursuant to 37 C.F.R. §1.98(d), Applicants are not enclosing copies of these publications. Copies will be provided upon request, however.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(b) prior to a first Office Action on the merits. It is believed that no fee is required with this submission.

However, should a fee be required, the Commissioner is hereby authorized to charge any required fees to Deposit Account No. 50-3129.

U.S. Patents

<u>Number</u>	<u>Issue Date</u>	<u>Patentee</u>	<u>Class/Subclass</u>
4,191,747	03-1980	Scheicher	
4,846,835	07-1989	Grande	
4,997,443	03-1991	Walthall et al.	
5,041,138	08-1991	Vacanti et al.	
5,071,644	12-1991	Viegas et al.	
5,082,670	01-1992	Gage et al.	
5,126,141	06-1992	Henry	
5,192,326	03-1993	Bao et al.	
5,277,911	01-1994	Viegas et al.	
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Foreign Documents

<u>Number</u>	<u>Publication Date</u>	<u>Patentee</u>	<u>Country</u>
0 361 957	04-04-1990	Organogenesis, Inc.	EP
WO 92/06702	04-30-1992	New York University	PCT
WO 93/16687	02-09-1993	Board of Regents, The University of Texas System	PCT
WO 93/24627	12-09-1993	Case Western Reserve University, The Metrohealth System, and The University of Akron	PCT
WO 94/25079	11-10-1994	Massachusetts Institute of Technology and Children's Medical Center Corporation	PCT
WO 94/25080	11-10-1994	Massachusetts Institute of Technology and Children's Medical Center Corporation	PCT
WO 96/15226	05-1996	Neurospheres Holding Ltd.	PCT
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Remarks

This statement should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, Applicants invite the Examiner to make an independent evaluation of the cited art to determine its relevance to the subject matter of the present application. Applicants are of the opinion that their claims patentably distinguish over the art referred to herein, either alone or in combination.

Respectfully submitted,



Tiffany B. Salmon
Reg. No. 55,589

Dated: December 7, 2004

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Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	10/713,472
(use as many sheets as necessary)		Filing Date	November 14, 2003
		First Named Inventor	Charles A. Vacanti
		Group Art Unit	1615
		Examiner Name	
Sheet	1	of	7
		Attorney Docket Number	VAC 102 CON (2)

U.S. PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	US Patent Document		Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Number	Kind Code ² (if known)				
		4,191,747		Scheicher	03-1980		
		4,846,835		Grande	07-1989		
		4,997,443		Walhall et al.	03-1991		
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		5,071,644		Viegas et al.	12-1991		
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		5,126,141		Henry	06-1992		
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		5,277,911		Viegas et al.	01-1994		
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		5,318,780		Viegas et al.	06-1994		
		5,405,366		Scheicher	04-1995		
		5,410,016		Hubbell et al.	04-1995		
FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴				
		EP	0 361 957	Organogenesis, Inc.	04-04-1990		
		PCT	WO 92/06702	New York University	04-30-1992		
		PCT	WO 93/16687	Board of Regents, The University of Texas System	02-09-1993		

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Substitute for form 1449A/PTO				Complete if Known	
				Application Number	10/713,472
				Filing Date	November 14, 2003
				First Named Inventor	Charles A. Vacanti
				Group Art Unit	1615
				Examiner Name	
Sheet	2	of	7	Attorney Docket Number	VAC 102 CON (2)

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	US Patent Document		Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		5,411,883		Boss et al.	05-1995	
		5,443,950		Naughton et al.	08-1995	
		5,512,600		Mikos et al.	04-1996	
		5,514,378		Mikos et al.	05-1996	
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		5,567,612		Vacanti et al.	10-1996	
		5,575,815		Slepian et al.	11-1996	
		5,578,485		Naughton et al.	11-1996	
		5,589,376		Anderson et al.	12-1996	
		5,593,974		Rosenberg et al.	01-1997	
		5,667,778		Atala	09-1997	
		5,696,175		Mikos et al.	12-1997	
		5,709,854		Griffith-Cima et al.	01-1998	
		5,716,404		Vacanti et al.	02-1998	
		5,736,372		Vacanti et al.	04-1998	
		5,750,376		Weiss et al.	05-1998	
		5,753,506		Johe	05-1998	

FOREIGN PATENT DOCUMENTS								
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		Office ³	Number ⁴	Kind Code ⁵ (if known)				
		PCT	WO 93/24627		Case Western Reserve The Metrohealth System, and The University of Akron	12-09-1993		
		PCT	WO 94/25079		Massachusetts Institute of Technology, and Children's Medical Center Corporation	11-10-1994		

Examiner's Signature	Date Considered
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Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/713,472
Sheet	3	of	7	Filing Date	November 14, 2003
				First Named Inventor	Charles A. Vacanti
				Group Art Unit	1615
				Examiner Name	
				Attorney Docket Number	VAC 102 CON (2)

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	US Patent Document		Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ⁴ (if known)			
		5,759,830		Vacanti et al.	06-1998	
		5,762,926		Gage et al.	06-1998	
		5,770,193		Vacanti et al.	06-1998	
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		5,786,216		Dionne et al.	07-1998	
		5,795,790		Schinistine et al.	08-1998	
		5,804,178		Vacanti et al.	09-1998	
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FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)			
		PCT	WO 94/25079	Massachusetts Institute of Technology, and Children's Medical Center Corporation	11-10-1994		
		PCT	WO 94/25080	Massachusetts Institute of Technology, and Children's Medical Center Corporation	11-10-1994		
		PCT	WO 96/15226	Neurospheres Holding Ltd.	05-1996		
		PCT	WO 96/40304	Reprogenesis, Inc.	12-19-1996		
		PCT	WO 98/30678	Laywell, et al.	07-16-1998		

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		Group Art Unit	1615
		Examiner Name	
Sheet	4	of	7
		Attorney Docket Number	VAC 102 CON (2)

OTHER ART – NON PATENT LITERATURE DOCUMENTS			
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		AHMED, et al., "BDNF enhances the differentiation but not the survival of CNS stem cell-derived neuronal properties" <i>The Journal of Neuroscience</i> 15(8): 5765-5778 (1995).	
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		REYNOLDS et al., "Generation of Neurons and Astrocytes from Isolated Cells of the Adult Mammalian Central Nervous System," <i>Science</i> , 255:1707-1710, Mar. 27, 1992.	
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		TAUPIN and GAGE, "Adult neurogenesis and neural stem cells of the central nervous system in mammals" <i>Journal of Neuroscience Research</i> 69(6): 745-749 (2002).	
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		TAYLOR et al., "Widespread Engraftment of Neural Progenitor and Stem-Like Cells Throughout the Mouse Brain," <i>Transplantation Proceedings</i> , 29:845-847, 1997.	
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